

Commentary on: Are we overpathologizing everyday life? A tenable blueprint for behavioral addiction research

Excessive behaviors are not necessarily addictive behaviors

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Background and Aims: The commentary aims to provide clarity to the article “Are we overpathologizing everyday life? A tenable blueprint for behavioral addiction research.” **Methods:** We provide another viewpoint for the important issues of behavior addiction. **Result:** The course of behavior addiction should be further studied. The criteria of withdrawal and tolerance of behavior addiction are ill-defined and need to be further evaluated. **Conclusions:** The etiology, course, presentation, and functional impairment of behavior addiction should be validated by evidence-based data before being defined as a disorder.

Keywords: behavioral addiction, Internet Gaming Disorders, criteria, withdrawal, tolerance

The review has provided insight into a theoretical and confirmatory research approach to develop a “new” behavior addiction. Billieux, Schimmenti, Khazaal, Maurage and Heeren (2015) have pointed out the essential issues in defining an addictive disorder without clear objective or biological markers. These critical points should be addressed when defining an excessive behavior as an addictive disorder.

The authors suggested that the etiology and course of these excessive behaviors are essential to define them as an addictive disorder. For example, the data or evidence-based results for a chronic course of Internet gaming disorder are inadequate. However, the etiology and course are highly varied in addictive disorders, not only in behavior addiction, but also in substance use disorder. Further, to evaluate the etiology and course of these behaviors, a preliminary definition to recruit the subjects is necessary. The inclusion of Internet gaming disorder in DSM-5 section III, but not official criteria, could provide a preliminary tool to identify possible subjects to investigate *vis-à-vis* their etiology and course over the world. Nevertheless, prospective research focusing on etiology and course of behavior addictions is necessary before these factors are recruited as a definite disorder.

Billieux et al. (2015) have also pointed out another important issue: defining the tolerance and withdrawal symptoms of behavior addiction. The onset of withdrawal symptoms depends on the half-life of the substance (Petursson, 1994). The variation of withdrawal symptoms depends on the pharmacological effect of the substance. However, most behaviors vulnerable to addiction, such as gambling, online gaming, or sexuality, have no direct biological effect on the brain as substances do. It is difficult to determine withdrawal symptoms among subjects with behavioral addiction. Take Internet gaming disorder as an example: psy-

chological symptoms of withdrawal vary in presentation, onset, and duration (Ko, 2014). Although 86.7% of Internet Gaming Disorder (IGD) subjects have declared abstinence from online gaming for two or three days intolerable (Ko et al., 2014), symptomatic presentations were varied and ill-defined. In DSM-5 (American Psychiatric Association, 2013), “is restless or irritable when attempting to cut-down or stop gambling” was used to define gambling disorder. On the other hand, since biological withdrawal symptoms of phencyclidine are not established in human subjects, it was not applied in the criteria of phencyclidine use disorder. Thus, whether the withdrawal symptoms were necessary to define a behavioral addiction should be evaluated or a consensus reached as soon as possible. However, the really important issue is to understand why subjects are unable to stop or control their problematic excessive behaviors.

The authors have also pointed out the problematic definition of the tolerance of some excessive behavior. Tolerance is based on the dosage of the substance. However, the dose of behavioral addiction is also ill-defined. Thus, tolerance is really ill-defined for behavior addiction. In DSM-5 (American Psychiatric Association, 2013), “need to gamble with increasing amounts of money in order to achieve the desired excitement” was used to define gambling disorder. A previous study refers to “feeling the need to play games for longer periods of time to experience excitement” to define tolerance of IGD (Petry et al., 2014). In our clinical experience, online gaming time usually reached a ceiling among chronic subjects of IGD. However, they presented the toler-

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ance symptoms as feeling unsatisfied even after excessive online gaming. Thus, to identify the strong, uninhibited, repeated and dysfunctional “feeling the need to extend the behavior” could be essential to define the “pathological” tolerance symptoms of excessive behaviors. In any case, the concept, presentation, definition, or biological marker of tolerance of behavior addiction could be varied and needs to be further evaluated and agreement must be reached using evidence-based data. Further, the really important issue is why subjects increased their problematic addictive behavior even while perceiving the consequences.

We agree with the viewpoint of the authors that we lack a theoretically sound model to develop the specificity of behavior addiction. We appreciate that the authors point out two important factors, functional impairment and stability of the dysfunctional behavior, to establish the specificity of behavior addiction. On the other hand, we need to identify the true subjects with behavior addiction who need treatment, but not overpathologize an excessive user with adequate function. Not only the evidence of symptoms similar to substance use disorder but the intensity, frequency, and dysfunctional presentations of symptoms should also be evaluated to contribute to specificity of behavior addiction, such as IGD (Ko, 2014). Thus, functional impairment has been suggested to be a prerequisite criterion for Internet gaming disorder (Ko, 2014).

As per substance use disorder, behavior addiction usually demonstrates a chronic and varied course vulnerable to context effect in our clinical experience. Addicts could remit spontaneously and relapse in a short time. The instability in course might not preclude the specificity of behavior addiction. However, to prospectively investigate the course of behavior addiction, criteria such as onset, remission, relapse, and their associated factors are very essential to demonstrate the specificity of behavior addiction. Based on these data, the course of excessive behaviors could be developed to determine whether they should be classified as an addictive disorder.

Some important issues, such as the core concept of addiction (Sussman & Sussman, 2011) or the possible basic brain mechanism of behavior addiction (Clark, 2014; Wang, Volkow, Thanos & Fowler, 2004) were not mentioned in this review. They could contribute to the validity of behavior addiction. Nevertheless, this review has emphasized how everyday life behaviors can become overpathologized as behavior addiction. As the authors suggested, the nature, course, and heterogeneity of these excessive behaviors should be understood before defining a behavior addiction.

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